

Listing of Claims:

1-53 (Canceled)

54. (Currently amended) A method for detecting an infection of an acid-resistant ~~microorganism~~ bacterium belonging to the genus *Helicobacter* in a ~~mammal-human~~, comprising:

- (a) incubating a stool sample of the ~~mammal human~~ with at least two different monoclonal antibodies, ~~fragments or derivatives thereof or Fab-, F(ab)'₂, Fv-, or scFv-fragments thereof~~ under conditions allowing formation of complexes between antigens from the acid-resistant ~~microorganism~~ bacterium and the antibodies ~~fragments or derivatives thereof or Fab-, F(ab)'₂, Fv-, or scFv-fragments thereof~~, in which
- (aa) a first monoclonal antibody ~~or fragment or derivative thereof or Fab-, F(ab)'₂, Fv-, or scFv-fragment thereof~~ specifically binds an epitope of a first antigen, which shows at least with some ~~mammals humans~~ a structure after intestinal passage that corresponds to a native structure, or a structure which a ~~mammal human~~ produces antibodies against after being infected or immunized with the acid-resistant ~~microorganism~~ bacterium, an extract or lysate thereof, protein therefrom, a fragment thereof or synthetic peptide, which epitope is the epitope of an antigen selected from the group consisting of: a urease, a heat shock protein, an alkylhydroperoxide-reductase, a 20kDa-protein, a 16.9kDa-protein and a 33.8kDa-protein;
- (ab) a second monoclonal antibody ~~or fragment or derivative thereof or Fab-, F(ab)'₂, Fv-, or scFv-fragment thereof~~ specifically binds an epitope of a second antigen, differing from the epitope of the first antigen, which shows at least with some ~~mammals humans~~ a structure after intestinal passage that corresponds to the native structure, or a structure which a ~~mammal human~~ produces antibodies against after being infected or immunized with the acid-resistant bacterium, an extract or lysate thereof, a protein therefrom, a fragment thereof or a synthetic peptide, in which the groups of ~~mammals humans~~ according to (aa) and (ab) may overlap, and in total essentially make up the overall number of infected, ~~mammals humans~~, which epitope is the epitope of an antigen selected from the group consisting of: urease, a heat shock protein, an alkylhydroperoxide-reductase, a 20kDa-protein, a 16.9kDa-protein and a 33.8kDa-protein; and

- (b) detecting the formation of at least one antigen-antibody complex according to (aa) or (ab).

55. (Canceled)

56. (Canceled)

57. (Currently Amended) A method according to Claim [[56]] 54 wherein the bacterium is a bacterium belonging to the species *Helicobacter pylori*, ~~the species *Helicobacter hepaticus*, the species *Mycobacterium tuberculosis*, or the species *Campylobacter pylori*.~~

58. (Previously presented) A method according to Claim 54, wherein the epitope of the first antigen is an epitope of a urease ~~and the epitope of the second antigen is an epitope selected from the group consisting of: a heat shock protein, an alkylhydroperoxide reductase, a 20kDa protein (3-dehydroquinase type II), a 16.9kDa protein (neutrophilactivating protein) and a 33.8kDa protein (fructose-bisphosphate aldolase).~~

59. (Previously presented) A method according to Claim 58, wherein the urease is a β -urease of *Helicobacter pylori*.

60. (Previously presented) A method according to Claim 58, wherein the heat shock protein is a Hsp60.

61. (Previously presented) A method according to Claim 58, wherein the alkylhydroperoxide-reductase is the 26kDa-protein of *Helicobacter pylori*.

62. (Previously presented) A method according to Claim 54, wherein the first monoclonal antibody comprises a heavy chain having at least one of the following CDRs: SEQ ID NO:25, SEQ ID NO:26 and SEQ ID NO:27, or SEQ ID NO:28, SEQ ID NO:29 and SEQ ID NO:30.

63. (Previously presented) A method according to Claim 62, wherein the first monoclonal antibody comprises a light chain having at least one of the following CDRs: SEQ ID NO:37, SEQ ID NO:38 and SEQ ID NO:39 or SEQ ID NO:40, SEQ ID NO:41 and SEQ ID NO:42.

64. (Previously presented) A method according to Claim 54, wherein the first monoclonal antibody is obtained from hybridoma HP9.lm/3C2-F8-E2 having accession number DSM ACC2362.

65. (Previously presented) A method according to Claim 54, wherein the second monoclonal antibody comprises a heavy chain having at least one of the following CDRs: SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:3.
66. (Previously presented) A method according to Claim 65, wherein the second monoclonal antibody comprises a light chain having at least one of the following CDRs: SEQ ID NO:7, SEQ ID NO:8 and SEQ ID NO:9.
67. (Previously presented) A method according to Claim 54, wherein the second monoclonal antibody is obtained from hybridoma HP16m/2A5-E6-E5 having accession number DSM ACC2356.
68. (Currently amended) A method according to Claim 54, further comprising:
- (a) incubating the stool sample with a third monoclonal antibody, in which (ac) the third monoclonal antibody ~~or fragment or derivative thereof or a Fab-, F(ab)'₂, Fv-, or scFv-fragment thereof~~ specifically binds an epitope of a third antigen, differing from the epitope of the first and second antigen, which shows at least with ~~mammals~~ humans a structure after intestinal passage that corresponds to the native structure, or a structure which a ~~mammal~~ human produces antibodies against after being infected or immunized with the acid-resistant ~~microorganism~~ bacterium, an extract or lysate thereof, a protein therefrom, a fragment thereof or a synthetic peptide,
 - in which the groups of ~~mammals~~ humans according to (aa), (ab) and (ac) may overlap and in total essentially make up the overall number of infected ~~mammals~~ humans, and
 - (b) detecting the formation of at least one antigen-antibody complex according to (aa), (ab) or (ac).
69. (Previously presented) A method according to Claim 68, wherein the epitope of the first antigen is an epitope of a urease, the epitope of the second antigen is an epitope selected from the group consisting of: a heat shock protein, an alkylhydroperoxide-reductase, a 20kDa-protein (3-dehydroquinase type II) a 16.9k Da-protein (neutrophil-activating protein) and a 33.8kDa-protein (fructose biphosphate aldolase), and the epitope of the third antigen is an epitope independently selected from the same group.
70. (Previously presented) A method according to Claim 68, wherein the epitope of the first antigen is an epitope of a β -urease from *Helicobacter pylori*; the epitope of the second antigen is an epitope of heat shock protein Hsp60 from *Helicobacter pylori*, the epitope of the third antigen is an epitope of 26kDa-protein (alkylhydroperoxide-reductase) of *Helicobacter pylori*.

71. (Previously presented) A method according to Claim 68, wherein the third monoclonal antibody comprises a heavy chain having at least one of the following CDRs: SEQ ID NO:13, SEQ ID NO:14 and SEQ ID NO:15.

72. (Previously presented) A method according to Claim 71, wherein the third monoclonal antibody comprises a light chain having at least one of the following CDRs: SEQ ID NO:19, SEQ ID NO:20 and SEQ ID NO:21.

73. (Previously presented) A method according to Claim 68, wherein the third monoclonal antibody is obtained from hybridoma HP15m/3E8-D9-D6 having accession number DSM ACC2355.

74. (Previously presented) A method according to Claim 54, wherein the antigen-antibody complex is detected by an immunological method selected from the group consisting of: ELISA, LISA, Western Blot or an immunochromatographic method.

75. (Previously presented) A method according to Claim 68, wherein the antigen-antibody complex is detected by an immunological method selected from the group consisting of ELISA, RIA, Western Blot or an immunochromatographic method.

76. (Previously presented) A method according to Claim 54, wherein the antibodies fragments or derivatives are fixed to a support comprising a test strip.

77. (Currently amended) A method for detecting an infection with *Helicobacter pylori* in the stool of a ~~mammal~~ human, comprising:

- (a) incubating a stool sample with at least two different monoclonal antibodies, ~~fragments or derivatives thereof or a Fab-, F(ab)'₂, Fv-, or scFv-fragments thereof~~ under conditions allowing antigen-antibody complex formation, in which
 - (aa) a first monoclonal antibody, ~~fragment or derivative thereof or a Fab-, F(ab)'₂, Fv-, or scFv-fragment thereof~~ specifically binds β -urease or a fragment thereof;
 - (ab) a second monoclonal antibody, ~~fragment or derivative thereof or a Fab-, F(ab)'₂, Fv-, or scFv-fragment thereof~~ specifically binds the 26kDa-antigen or a fragment thereof or specifically binds Hsp60 or a fragment thereof, and
- (b) detecting the formation of at least one antigen-antibody complex as set out in (aa) or (ab).

78. (Previously presented) A method according to Claim 76, wherein the first monoclonal antibody

comprises a heavy chain having at least one of the following CDRs: SEQ ID NO:25, SEQ ID NO:26 and SEQ ID NO:27, or SEQ ID NO:28, SEQ ID NO:29 and SEQ ID NO:30.

79. (Previously presented) A method according to Claim 77, wherein the first monoclonal antibody comprises a light chain having at least one of the following CDRs: SEQ ID NO:37, SEQ ID NO:38 and SEQ ID NO:39 or SEQ ID NO:40, SEQ ID NO:41 and SEQ ID NO:42.

80. (Previously presented) A method according to Claim 76, wherein the first monoclonal antibody is obtained from hybridoma HP9.lm/3C2-F8-E2 having accession number DSM ACC2362.

81. (Previously presented) A method according to Claim 76, wherein the second monoclonal antibody comprises a heavy chain having at least one of the following CDRs: SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:3.

82. (Previously presented) A method according to Claim 80, wherein the second monoclonal antibody comprises a light chain having at least one of the following CDRs: SEQ ID NO:7, SEQ ID NO:8, and SEQ ID NO:9.

83. (Previously presented) A method according to Claim 76, wherein the second monoclonal antibody is obtained from hybridoma HP16m/2A5-E6-E5 having accession number DSM ACC2356.

84. (Currently amended) A method according to Claim 76, further comprising:

- (a) incubating the stool sample with (ac) a third monoclonal antibody, ~~fragment or derivative thereof or a Fab-, F(ab)'₂, Fv-, or scFv-fragment thereof~~, which specifically binds 26kDa-antigen or fragment thereof; and
- (b) detecting the formation of at least one antigen-antibody complex as set out in (aa), (ab) or (ac).

85. (Previously presented) A method according to Claim 84, wherein the third monoclonal antibody comprises a heavy chain at least one of the following CDRs: SEQ ID NO:13, SEQ ID NO:14 and SEQ ID NO:15.

86. (Previously presented) A method according to Claim 85, wherein the third monoclonal antibody comprises a light chain having at least one of the following CDRs: SEQ ID NO:19, SEQ ID NO:20 and SEQ ID NO:21.

87. (Previously presented) A method according to claim 84, wherein the third monoclonal antibody is obtained from hybridoma HP15m/3E8-D9-D6 having accession number DSM ACC2355.

88. (Previously presented) A method according to Claim 77, wherein the antigen-antibody complex is detected by an immunological method selected from the group consisting of: ELISA, RIA, Western Blot or an immunochromatographic method.

89. (Previously presented) A method according to Claim 84, wherein the antigen-antibody complex is detected by an immunological method selected from the group consisting of: ELISA, RIA, Western Blot or an immunochromatographic method.

90. (Currently amended) A method according to Claim 88, wherein the antibodies, ~~fragments or derivatives thereof~~ Fab-, F(ab)'₂, Fv-, or scFv-fragments thereof are fixed to a support comprising a test strip.

91. (Currently amended) A method according to Claim 89, wherein the antibodies, ~~fragments or derivatives thereof~~ Fab-, F(ab)'₂, Fv-, or scFv-fragments thereof are fixed to a support comprising a test strip.